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10/813,690

03/31/2004

Michio Kadota

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07/06/2006

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MCLEAN, VA 22102

EXAMINER

DOUGHERTY, THOMAS M

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

10/813,690

Applicant(s)

KADOTA, MICHIO

Examiner

Thomas M. Dougherty

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2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 and 23-32 is/are allowed.
- 6) ☒ Claim(s) 1 and 11 is/are rejected.
- 7) ☒ Claim(s) 2-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/654,113.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 304 7/05

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsutsumi et al. (JP 09-018272). Tsutsumi et al. teach a surface acoustic wave device comprising: a LiTaO₃ substrate (see constitution); and an interdigital transducer provided on the LiTaO₃ substrate (see PURPOSE), said interdigital transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr, Zn, and W; wherein said interdigital transducer has a normalized film thickness H/λ within a range of approximately 0.001 to approximately 0.05 so as to excite a shear horizontal wave. See paragraph 36 of the translated description.

The device of Tsutsumi et al. as it is a surface acoustic wave device is intended for use in a communication device.

Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Baer et al. (US 5,283,037). Baer et al. teach (col. 4, l. 65 to col. 5, l. 16) a surface acoustic wave device comprising: a LiTaO₃ substrate (see constitution); and an interdigital transducer provided on the LiTaO₃ substrate (see PURPOSE), said interdigital transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr, Zn, and W; wherein said interdigital transducer has a normalized film

thickness H/λ within a range of approximately 0.001 to approximately 0.05 (the cited 4-400 microns of Baer et al. results in a ratio of .025 to .25) so as to excite a shear horizontal wave (col. 8, l. 12). The device of Baer et al. as it is a surface acoustic wave device is intended for use in a communication device in that it communicates viscosity, etc.

Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimoe et al. (EP 0 734 120 A1). Shimoe et al. teach a surface acoustic wave device comprising: a LiTaO_3 substrate (see abstract); and an interdigital transducer provided on the LiTaO_3 substrate, said interdigital transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr, Zn, and W (see col. 5, line 10); wherein said interdigital transducer has a normalized film thickness H/λ within a range of approximately 0.001 to approximately 0.05 so as to excite a shear horizontal wave (see abstract). .

The device of Shimoe et al. as it is a surface acoustic wave device is intended for use in a communication device (a filter).

Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al. (US 6,037,847). Ueda et al. teach a surface acoustic wave device comprising: a LiTaO_3 substrate (see abstract); and an interdigital transducer provided on the LiTaO_3 substrate, said interdigital transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr, Zn, and W (see col. 10, lines 54-65); wherein said interdigital transducer has a normalized film thickness H/λ within a range of

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approximately 0.001 to approximately 0.05 so as to excite a shear horizontal wave (see abstract).

The device of Ueda et al. as it is a surface acoustic wave device is intended for use in a communication device (a passband filter).

Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yutaka (GB 2 288 503). Yutaka teaches a surface acoustic wave device comprising: a LiTaO_3 substrate (see abstract); and an interdigital transducer provided on the LiTaO_3 substrate, said interdigital transducer containing as a major component at least one of Au, Ag, Ta, Mo, Cu, Ni, Cr, Zn, and W (see page 6, line 4; wherein said interdigital transducer has a normalized film thickness H/λ within a range of approximately 0.001 to approximately 0.05 so as to excite a shear horizontal wave (see abstract)).

The device of Yutaka as it is a surface acoustic wave device is intended for use in a communication device (a filter).

Allowable Subject Matter

Claims 2-10 and 12-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 21 and 23-32 are allowed.

Direct inquiry to Examiner Dougherty at (571) 272-2022.

tmd
tmd

June 21, 2006


TOM DOUGHERTY
PRIMARY EXAMINER